



Jet Corrections meeting

<http://www-cdf.lbl.gov/~currat/talks/>

Charles Currat
LBNL

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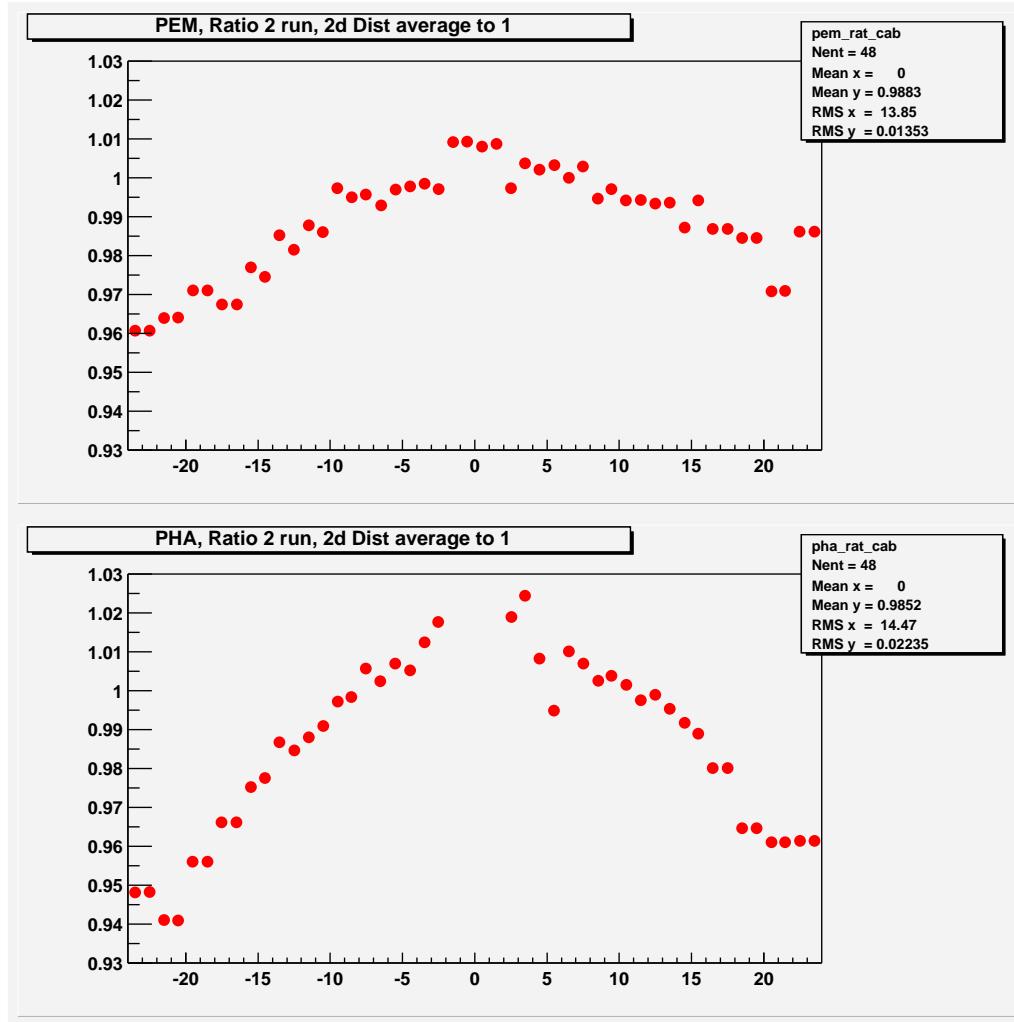
- ◆ Correction for time dependence in dijet balance



Laser runs



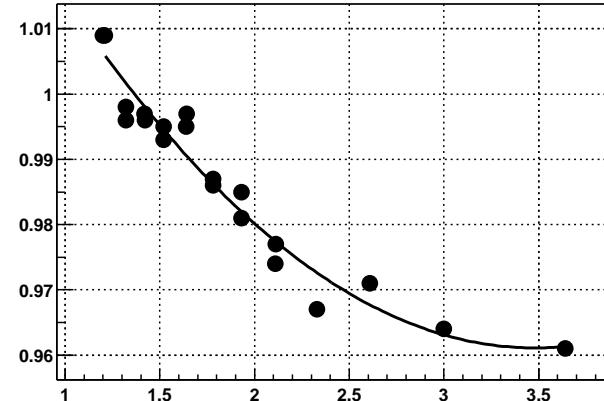
Ratio of laser runs #145631 (Jun 1st) over #139524 (Feb 21st)



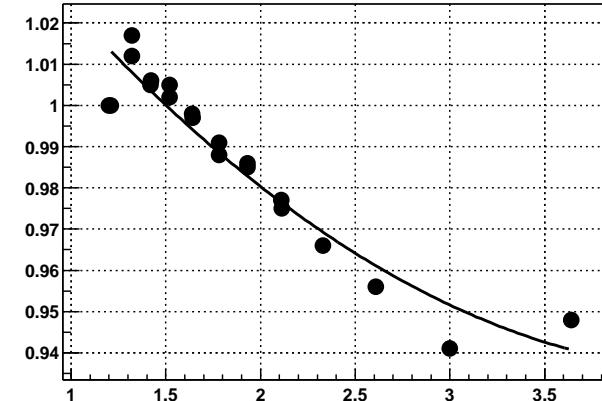
Laser runs

- ◆ Idea: derive time dependence function to be applied at jet level out of laser runs (so, tower level)
- ◆ Correct $\text{jet}(E_T)$ separately in PEM and PHA according to jet's emFraction

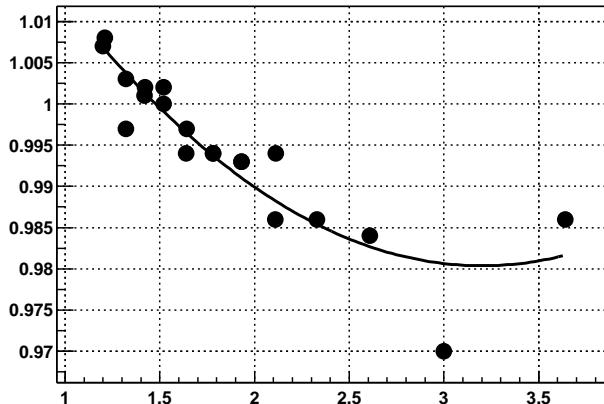
PEM-W



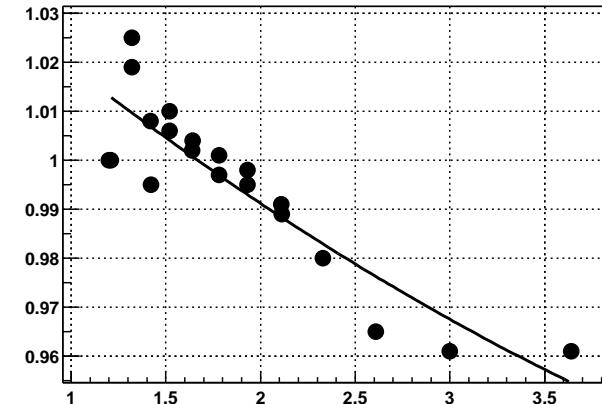
PHA-W



PEM-E



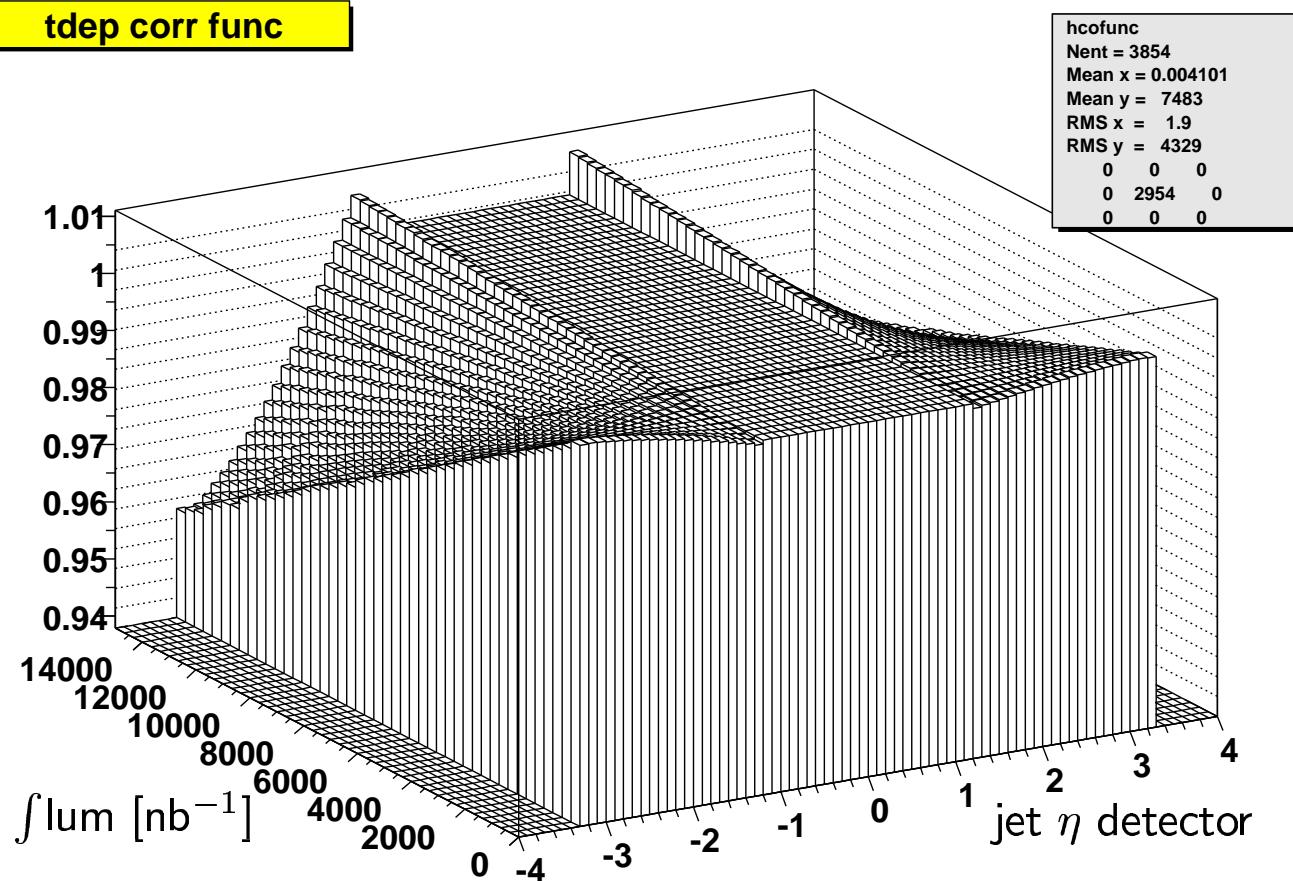
PHA-E



Fit with pol. 2nd degree

Correction function

- ◆ Add linear time dependence (i.e. integrated luminosity) between Feb/21 – June/1 (shutdown, run #145200). Extrapolate backwards until Feb/4.
- ◆ Apply (time, η)-dependent function on jets according to run # and jet($\eta_{centroid}$). Jets have R=0.7.

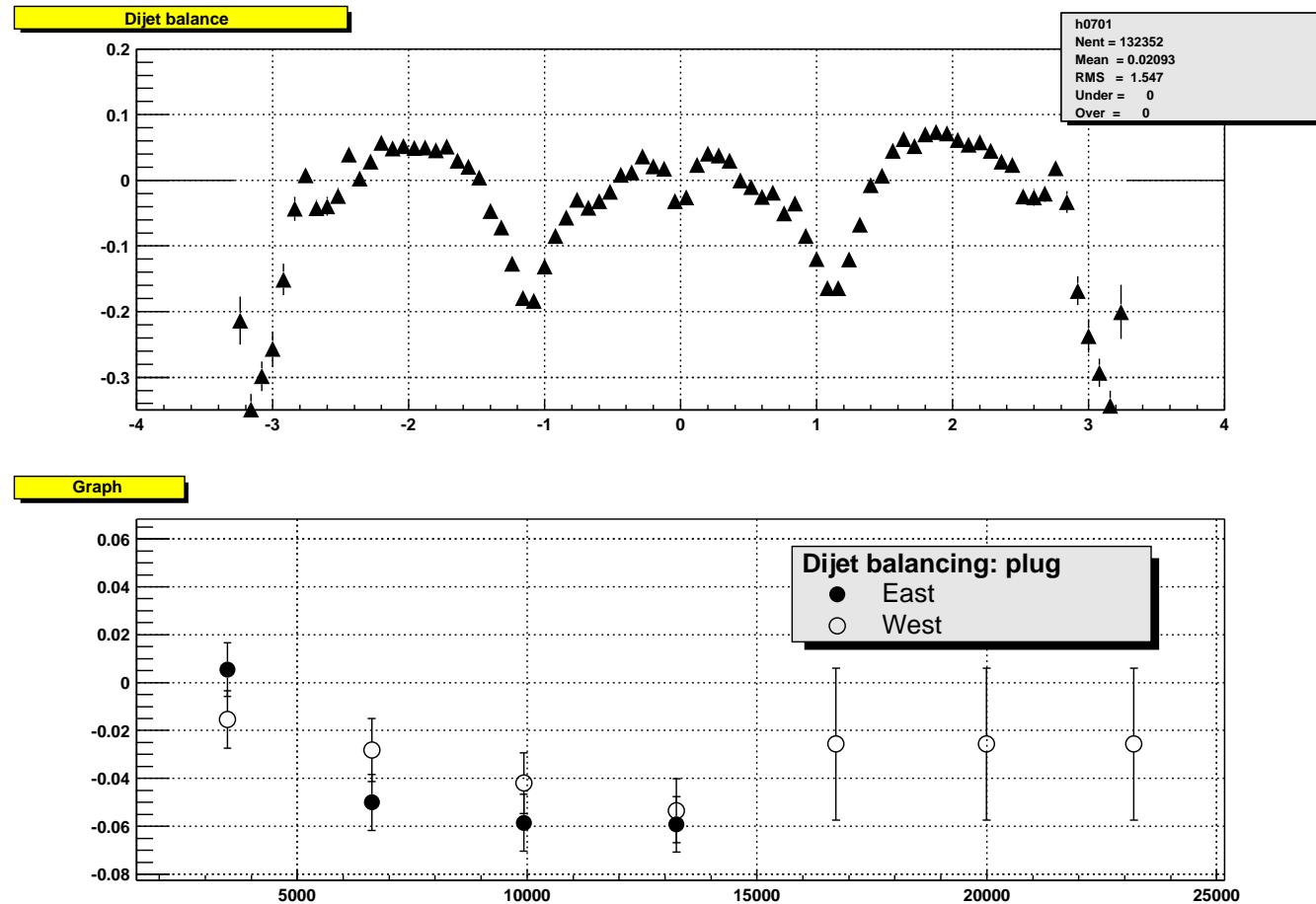




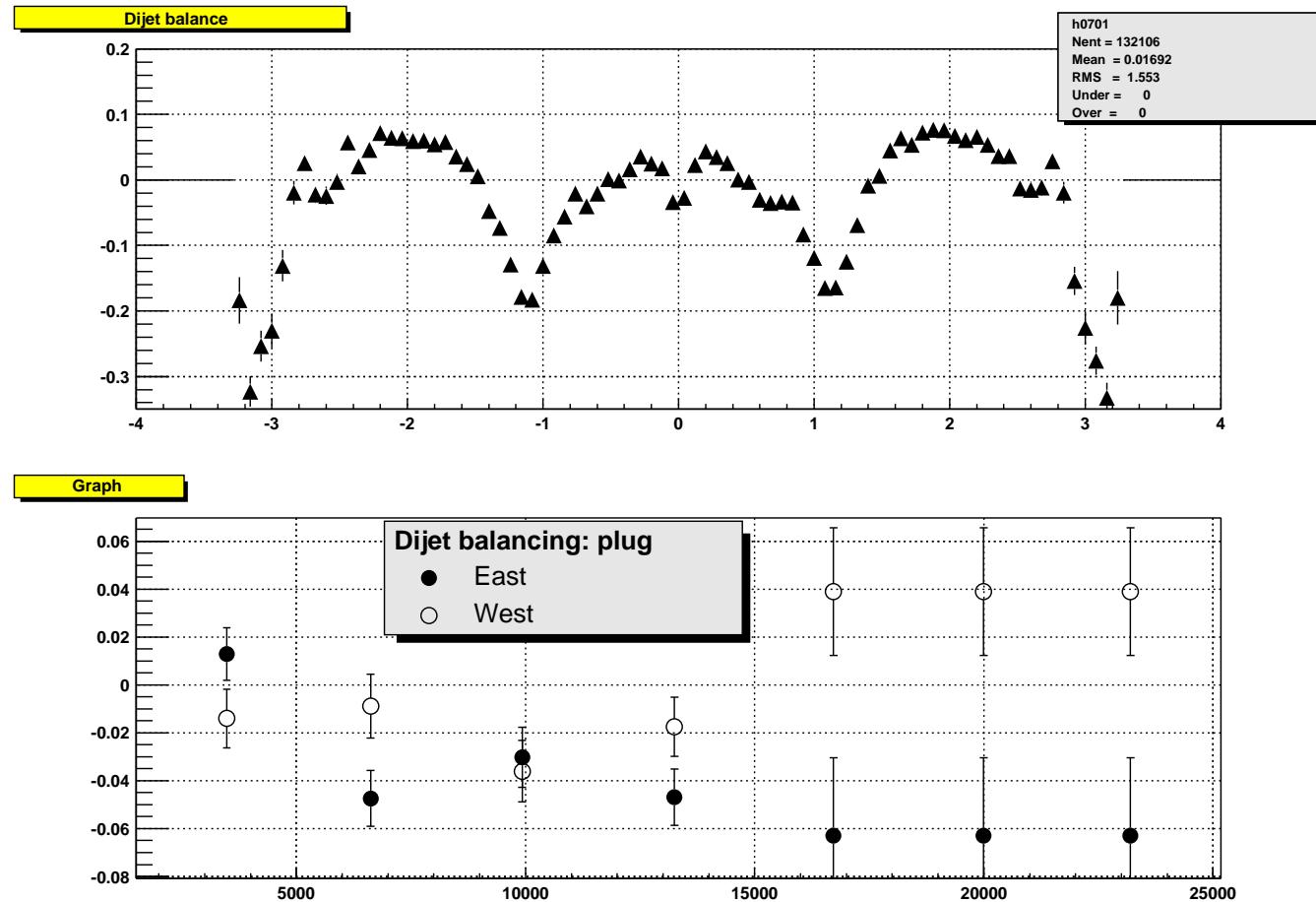
Dijet balance, before



- ◆ Plug calorimeter. High η region, $|\eta| > 2.4$. Uncorrected.
- ◆ Points after 15 pb^{-1} (shutdown) not included.



- ❖ Plug calorimeter. High η region, $|\eta| > 2.4$. **Corrected.**
- ❖ Points after 15 pb^{-1} (shutdown) not included.





Comments



- ❖ There's an effect ... but still some work needed
- ❖ More precisions on laser runs [which sector(s), DAQ reliability] ?
- ❖ $R_{jet} = 0.7$... apply correction at tower level (inside jet, no need to reclusterize) ?